Sexuality for the Elderly: Issues and Answers

Michael Krychman MD
Associate Clinical Professor UCI
Executive Director of the Southern California Center for Sexual Health and Survivorship Medicine
AASECT Certified Sexual Counselor
Current Population-Based Health Issues for Elder Women’s Sexuality

- Increasing numbers of sexually active elders
  - home - day care - residential care
  - different expectations, experiences, social mores
  - alternative relationships and lifestyles

- Increasing numbers of adult and family caregivers
  - conflicting generational perceptions and needs

- Dysfunctional family and intimate relationships
  - effects of past and current sexual trauma

KEY POINT - Need for interdisciplinary approach
  - physicians, nurses, psychologists, physical therapists
  - family
Frequency of Sexual Activity in Elder Women

- 21% aged 70-80 had intercourse in year before survey (Nicolosi 2006)
- 54% aged 75-85 sexually active 2-3 times, per month (Lindau 2007)
- 23-25% sexually active one or more times, per week (Nicolosi 2006, Lindau 2007, Agronin 2009)
- Increasing frequency of oral sex, masturbation (Lindau 2007, Agronin 2009)

KEY POINTS

• significant numbers of sexually active elders
• increasing role of non-coital sexual activity
### 2010 National Survey of Sexual Health and Behavior

<table>
<thead>
<tr>
<th>Age</th>
<th>Intercourse Women</th>
<th>Intercourse Men</th>
<th>Masturbation Women</th>
<th>Masturbation Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-59</td>
<td>51%</td>
<td>58%</td>
<td>54%</td>
<td>72%</td>
</tr>
<tr>
<td>60-69</td>
<td>42%</td>
<td>54%</td>
<td>47%</td>
<td>61%</td>
</tr>
<tr>
<td>70+</td>
<td>27%</td>
<td>43%</td>
<td>33%</td>
<td>46%</td>
</tr>
</tbody>
</table>

Ageism - Societal View
Covey 1989; Hodson 1994; Hajjar 2004

- Discrimination based myths, biases, stereotypes
  - No longer physically beautiful
    - ugly, disfigured
  - Useless burden to society
    - annoying, lonely, stubborn, helpless, depressed
    - cognitively impaired, chronically sick, disabled
  - Devalued – no longer entitled to social benefits
    - e.g., love and sex
Ageism, plus Elder Sexuality
Covey 1989; Hodson 1994; Hajjar 2004

- Perceptions
  - asexual – no sexual interest, need, desire, activity
    - disappears with age (at menopause)
  - elder sexual needs are behavior problems
    - inappropriate, immoral, disgraceful, disgusting
    - men – sinister, predatory – “dirty old man”
    - women - hapless, humorous, pathetic – “cougar; old hag”

- Effect - social pressure to adopt passive sexual role
  - sex is only for young, beautiful, healthy
Female Sexual Dysfunction  Ambler et al. 2012 (REVIEW)

- Prevalence: 43% (vs. 31% in men)
  - varies among different racial groups
  - social and cultural factors

- Risk factors
  - age, menopause
  - medical - cardiovascular, diabetes, endocrine, arthritis, urinary tract, cancer
  - surgical – GYN; GU; pelvic floor, bariatric
  - psychosocial - depression, body image, smoking, substance use
  - pharmaceutical - side effects; poly-medication

- Impact on self-esteem, quality of life, emotional stability, relationships
Older gays and lesbians
- continued sexual activity
- high satisfaction

Emerging homosexuality - “new” LGBT identity
- unaccepted roles from earlier life
- activity based on availability of male partner
- with/without heterosexual partner (affairs w/in marriages)
- encounters among elders with dementia
  - may/may not have capacity to understand circumstances and consequences

Social biases - LGBT, plus ageism
Chlamydia - Rates by Age and Sex
United States, 2010

Centers for Disease Control and Prevention, Sexually Transmitted Diseases in the US, 2008
(www.cdc.gov/std/stats08/trends.htm)
Gonorrhea, Rates by Age and Sex, United States, 2010

Centers for Disease Control and Prevention, Sexually Transmitted Diseases in the US, 2008
(www.cdc.gov/std/stats08/trends.htm)
Primary and Secondary Syphilis, Rates by Age and Sex, United States, 2010

Centers for Disease Control and Prevention, Sexually Transmitted Diseases in the US, 2008
(www.cdc.gov/std/stats08/trends.htm)
HPV in Older Women Lindau 2008

- DNA analysis of 1,028 women; ages 57-85
- High risk HPV = 6% (1/16 women)
  - 27% with multiple high-risk genotypes (6,11,16,18)
- High risk factors (Schick 2010; Slinkard 2011)
  - unmarried; prior hysterectomy; chemotherapy; smoking
  - no condom use; multiple partners
HIV/AIDS – Estimated Cases, by Age: 2005

No. = 37,331

Age

Percentage


CDC: Prevention Challenges: Persons Aged 50 and Older, 2008
(www.cdc.gov/hiv/topics/over50/resources.htm;
www.cdc.gov/hiv/topics/over50/index.htm)
Increasing incidence and prevalence

- *fastest growing population with HIV!*
  - aging cohort of infected persons
  - improved survival - antiretroviral therapy
  - new infection, or delayed diagnosis

- 24% of all persons living w HIV/AIDS
  - 15% of new diagnoses
  - 19% of AIDS Dx - increase from 17% in 2001

- 35% of all AIDS-related *deaths*
  - 15th leading cause in elders
Summary of Key Points

- Sexually active – especially non-coital
- Ageism - effect of myths biases and stereotypes
  - unfulfilled expectations based on ageism
- Need for interdisciplinary and family approach
  - bio-Psycho-Social effects on sexuality
- Screening for safe sex practices and STDs
- Special needs for residential elders and caregivers
- Initiate the conversation
Variety of Medications Associated with Sexual Problems

- **Antidepressants/mood stabilizers**
  - Selective serotonin reuptake inhibitors (SSRIs)
  - Serotonin-norepinephrine reuptake inhibitors (SNRIs)
  - Tricyclics
  - Antipsychotics
  - Benzodiazepines
  - Antiepileptics
  - Monoamine oxidase inhibitors (MOAIs)

- **Cardiovascular agents**
  - Lipid-lowering agents
  - Digoxin

- **Hormones**
  - Oral contraceptives
  - Estrogens
  - Progestins
  - Antiandrogens
  - Gonadotropin-releasing hormone (GnRH) agonists

- **Antihypertensives**
  - β-blockers
  - α-blockers
  - Diuretics

- **Other**
  - Histamine₂-receptor blockers
  - Narcotics
  - Amphetamines
  - Anticonvulsants

Overlap of FSDs

- Sexual Desire Disorders
- Sexual Arousal Disorder
- Orgasmic Disorder
- Dyspareunia
- Vaginismus

Basson Urology 2001
Sexual function and aging

- Decline in physical health
- Decline in androgen levels
- Decline in androgen levels
- Decline in sexual activity
- Decline in desire
- Decline in estrogen levels
- Fear of sexual relations
- Delayed orgasm or anorgasmia
- Dyspareunia and vulvar/vaginal atrophy

Many Users Claim Vaginal Estrogen Interrupts Routine and Requires Privacy

On average, takes 1 min, 50 secs to apply.

81% ensure they have privacy before applying vaginal estrogen therapy.

- 25% apply in bedroom
- 68% apply in the bathroom
- 21% apply in morning
- 11% early evening
- 61% at night
## Societal Constraints

<table>
<thead>
<tr>
<th></th>
<th>Total Agree</th>
<th>Total Females</th>
<th>60-65 %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Strongly + Somewhat Agree)</td>
<td>%</td>
<td>n=330</td>
</tr>
<tr>
<td>Society constrains the sexual expression of women my age more so than men my age</td>
<td>75</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Society is more accepting of discussing men’s physical sexual problems than women’s physical sexual problems</td>
<td>73</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>While there are medicines available for men’s physical sexual problems, the same do not exist for women’s physical sexual problems</td>
<td>71</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Society would prefer to believe that women my age do not have sex</td>
<td>53</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>
VVA and Sexual Function

- Cross-sectional, population-based study of 1,480 sexually active, postmenopausal women
- 57% had vulvovaginal atrophy
- 55% had female sexual dysfunction
- Women with sexual dysfunction ~4X more likely to also have vulvovaginal atrophy
- Conclusion: Reducing symptoms of one condition may also relieve symptoms of the other

FSD in aromatase inhibitor treated postmenopausal BC women is a greatly underestimate problem
- Baumgart et al (Menopause 2013:20 (2) 162-168
Continued sexual activity via coitus or masturbation increases blood flow to pelvic organs

Body Bouncer
Improved Personal Vibrostimulation Device Targeted for Males and Females with SCI, Neurological Disorders and the Elderly

Watzke & Elliott, University of British Columbia
Lubricants and Moisturizers

- **Lubricants** are considered temporary measures to relieve vaginal dryness during intercourse
  - Short duration of action
  - Must be applied frequently
  - Sexual aid

- **Moisturizers** are promoted as providing long-term relief of vaginal dryness
  - Continuous use - several times a week
  - Everyday aid

- Both OTC and FDA approved as cosmetics
## Minimally Absorbed Local Vaginal Topical Estrogens

<table>
<thead>
<tr>
<th>Composition</th>
<th>Dosing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaginal Cream 17 Beta Estradiol cream</td>
<td>Initial 2-4 g 1-2 wk</td>
</tr>
<tr>
<td></td>
<td>Maintenance: 1g/d (0.1mg active ingredient /g)</td>
</tr>
<tr>
<td>Conjugated estrogens</td>
<td>0.5-2.0 g/d (0.625 mg active ingredient/g)</td>
</tr>
<tr>
<td>(Formally conjugated equine estrogens)</td>
<td></td>
</tr>
<tr>
<td>Vaginal Ring</td>
<td>Device contains 2mg</td>
</tr>
<tr>
<td>17 Beta Estradiol</td>
<td>Releases 7.5 microgram per day for 90 d</td>
</tr>
<tr>
<td>Vaginal tablet</td>
<td>Initial dose: 1 tab q/day for 14 day</td>
</tr>
<tr>
<td>Estradiol hemihydrate</td>
<td>Maintenance 1 tab BIW</td>
</tr>
<tr>
<td></td>
<td>(Tablet 10.3 mcg of estradiol hemihydrate, equivalent to 10mcg of estradiol)</td>
</tr>
</tbody>
</table>

Is Local Really Local?

- Kendall et. al. cautions that vaginal estradiol is contraindicated in postmenopausal women on adjuvant aromatase inhibitors1.

- Labrie et. al. demonstrate that even small doses of vaginal preparations
  - Vagifem 25 μg; Premarin Vaginal Cream result in significant systemic absorption through estrogen naive vaginas(2).

- Naessen et al showed that 7.5 μg/24h could improve the lipid profile and bone density without affecting the endometrium3-5.

Current Overview of the Management of Urological Atrophy in Women with Breast Cancer


Table 1. Estradiol Preparations and Maximum Annual Delivered Dose

<table>
<thead>
<tr>
<th>Product name</th>
<th>Route/Type of administration</th>
<th>Typical regimen</th>
<th>Nominal daily delivery rate or administered lowest approved dose (mg/day)</th>
<th>Typical serum level (pg/mL)</th>
<th>Maximum annual delivered dose (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaginal estradiol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vagifem</td>
<td>Vaginal tablet</td>
<td>1 Tablet daily x 14 then 2 x weekly</td>
<td>10 μg</td>
<td>4.6</td>
<td>1.14</td>
</tr>
<tr>
<td>Estring</td>
<td>Vaginal ring</td>
<td>1 Ring vaginally q 3 months</td>
<td>7.5 μg</td>
<td>8.0</td>
<td>2.74</td>
</tr>
<tr>
<td>Etrace</td>
<td>Vaginal cream</td>
<td>1 g cream vaginally q week³</td>
<td>variable²</td>
<td>NA</td>
<td>7.1</td>
</tr>
<tr>
<td>FemRing</td>
<td>Vaginal ring</td>
<td>1 Ring vaginally q 3 months</td>
<td>0.05 mg</td>
<td>40.6</td>
<td>18.25</td>
</tr>
<tr>
<td>Oral estradiol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estrace tablets and generics</td>
<td>Oral tablet</td>
<td>1 Tablet p.o. qd</td>
<td>0.5 mg</td>
<td>55.4</td>
<td>182.5</td>
</tr>
<tr>
<td>Transdermal estradiol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divigel³</td>
<td>Gel</td>
<td>0.25 mg packet qd</td>
<td>0.003</td>
<td>9.8</td>
<td>1.09</td>
</tr>
<tr>
<td>Estrogel</td>
<td>Gel</td>
<td>0.75 mg/pump qd</td>
<td>0.035</td>
<td>28.3</td>
<td>12.78</td>
</tr>
<tr>
<td>Evamist³</td>
<td>Spray</td>
<td>1.53 mg spray qd</td>
<td>0.021</td>
<td>19.6</td>
<td>7.67</td>
</tr>
<tr>
<td>Climara⁴</td>
<td>Patch</td>
<td>1 Patch weekly</td>
<td>0.025</td>
<td>22</td>
<td>9.13</td>
</tr>
<tr>
<td>Menostar</td>
<td>Patch</td>
<td>1 Patch weekly</td>
<td>0.014</td>
<td>13.7</td>
<td>5.11</td>
</tr>
<tr>
<td>Vivelle-Dot⁵</td>
<td>Patch</td>
<td>1 Patch twice weekly</td>
<td>0.0375</td>
<td>34</td>
<td>12.78</td>
</tr>
</tbody>
</table>
Investigational Medications for FSD

- **VVA**
  - Vagitocin
  - Estriol
  - Human Bovine Clostrum
  - DHEA
  - Testosterone

- **Herbs and supplements**
  - Zestra
  - Arginimax
  - Vitality
  - Hersynergy

- **Flibanserin**
- **Bremelaotide**
- **Alprostadil/Femprox**
- **Lybrido/lybridos**
Consistent Efficacy:
4 different US Phase III Clinical Trials*

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147–M. Katz, L. DeRogatis, R. Ackerman, P. Sex Med 2012 (in press);
Testosterone Options for HSDD

- Testosterone transdermal patches
- Testosterone gels and patches approved for men
- Compounded 1% testosterone cream or gel for women
- Oral methyltestosterone (MT)
- Testosterone enanthate injections
- Subcutaneous pellets
- Sublingual testosterone
Neogyn® Vulvar Soothing Cream

- Cutaneous Lysate cream

- More than 100 cytokines, growth factors, inflammatory interleukins IL-1RA, IL-4 and IL-10.

- In clinical studies improvement in symptoms of atrophy as well as for vulvar pain disorders (vulvodynia, lichen sclerosus)

- Don’t forget the VUVLA

Michael L Krychman MD
mkrychman@aol.com